Message

From: Chern, Laura A - DNR [Laura.Chern@wisconsin.gov]

Sent: 2/26/2018 3:20:21 PM

To: Burdett, Cheryl [burdett.cheryl@epa.gov]

CC: Rheineck, Bruce D - DNR [BruceD.Rheineck@wisconsin.gov]

Subject: RE: Location for wells on CSD Production Area

Hi Cheryl,

We don't have good expertise with isotopes but USGS might be able to help you. One of my colleagues consulted Carol Kendall on a separate site.

https://www.usgs.gov/staff-profiles/carol-kendall

Hope you are well, Laura

We are committed to service excellence.

Visit our survey at http://dnr.wi.gov/customersurvey to evaluate how I did.

Laura Chern P.G. Phone: (608) 266-0126 Laura.Chern@wi.gov

From: Burdett, Cheryl [mailto:burdett.cheryl@epa.gov]

Sent: Friday, February 23, 2018 9:22 AM

To: Chern, Laura A - DNR < Laura. Chern@wisconsin.gov> **Subject:** Re: Location for wells on CSD Production Area

Hi Laura:

I am requesting help from our another EPA Regional office that has a geoprobe team and would be able to help map the Nitrate plume that is contaminating the ground water in the Central Sands area possibly due to overapplication of nitrates and phosphorus in a specific area.

I am looking to conduct Isotopic analysis of N15.

My thoughts are to test up gradient of all of Central Sands land application fields and production area and in the groundwater flow path to determine the plume.

If I eliminate other sources I can determine that Central Sands most likely is the source and if other sources are contributing that would be helpful to know too. As you know N15 does not rule out human septic so, I would have to know human sources as well.

Please let me know your thoughts on this idea. I have not run it through my management, but since WDNR has done so much work I really would like any help or suggestions.

Sincerely,

Cheryl Burdett R5 EPA/WECA

CAFO Program Manager work: 312-886-1463 Burdett.cheryl@epa.gov

From: Chern, Laura A - DNR < Laura. Chern@wisconsin.gov>

Sent: Thursday, February 22, 2018 2:24 PM

To: Burdett, Cheryl

Subject: RE: Location for wells on CSD Production Area

Hi Cheryl,

Here are locations for all wells. Please note there is a new piezometer at the site named CSD-7D. The shallow monitoring well at that same location is now CSD-7S.

Cheers, Laura

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Visit our survey at http://dnr.wi.gov/customersurvey to evaluate how I did.

Laura Chern P.G. Phone: (608) 266-0126 Laura.Chern@wi.gov

From: Burdett, Cheryl [mailto:burdett.cheryl@epa.gov]

Sent: Thursday, February 22, 2018 1:05 PM

To: Chern, Laura A - DNR < <u>Laura.Chern@wisconsin.gov</u>> **Subject:** Location for wells on CSD Production Area

Hi Laura:

I am trying to put together a map with all the sampling locations including the information from CSD monitoring wells. I have most the locations except for the Northing and East for wells:

CSD-5

CSD-6

CSD-7

CSD-8

CSD-9

Could you provide me the locations of those wells?

Sincerely,

Cheryl Burdett